Solving Quadratic Equations (J)

Solve each equation for x

1. $x^2 - 7x + 2 = -10$

2. $x^2 + 3x = -2$

3. $x^2 - 6x + 4 = -4$

4. $x^2 - 14x + 9 = -36$

5. $x^2 - 8x + 5 = -2$

6. $x^2 - 13x + 17 = -25$

7. $x^2 + 14x + 1 = -44$

8. $x^2 - 11x + 2 = -22$

9. $x^2 + 13x + 26 = -14$

10. $x^2 + x - 1 = 29$

11. $x^2 + 14x + 5 = -43$

12. $x^2 + 7x + 5 = -5$

Solving Quadratic Equations (J) Answers

Solve each equation for x

1. $x^2 - 7x + 2 = -10$
   $x^2 - 7x + 12 = 0$
   $(x - 3)(x - 4) = 0$
   $x = 3 , 4$

2. $x^2 + 3x = -2$
   $x^2 + 3x + 2 = 0$
   $(x + 1)(x + 2) = 0$
   $x = -1 , -2$

3. $x^2 - 6x + 4 = -4$
   $x^2 - 6x + 8 = 0$
   $(x - 4)(x - 2) = 0$
   $x = 4 , 2$

4. $x^2 - 14x + 9 = -36$
   $x^2 - 14x + 45 = 0$
   $(x - 5)(x - 9) = 0$
   $x = 5 , 9$

5. $x^2 - 8x + 5 = -2$
   $x^2 - 8x + 7 = 0$
   $(x - 7)(x - 1) = 0$
   $x = 7 , 1$

6. $x^2 - 13x + 17 = -25$
   $x^2 - 13x + 42 = 0$
   $(x - 7)(x - 6) = 0$
   $x = 7 , 6$

7. $x^2 + 14x + 1 = -44$
   $x^2 + 14x + 45 = 0$
   $(x + 5)(x + 9) = 0$
   $x = -5 , -9$

8. $x^2 - 11x + 2 = -22$
   $x^2 - 11x + 24 = 0$
   $(x - 3)(x - 8) = 0$
   $x = 3 , 8$

9. $x^2 + 13x + 26 = -14$
   $x^2 + 13x + 40 = 0$
   $(x + 5)(x + 8) = 0$
   $x = -5 , -8$

10. $x^2 + x - 1 = 29$
    $x^2 + x - 30 = 0$
    $(x - 5)(x + 6) = 0$
    $x = 5 , -6$

11. $x^2 + 14x + 5 = -43$
    $x^2 + 14x + 48 = 0$
    $(x + 6)(x + 8) = 0$
    $x = -6 , -8$

12. $x^2 + 7x + 5 = -5$
    $x^2 + 7x + 10 = 0$
    $(x + 5)(x + 2) = 0$
    $x = -5 , -2$